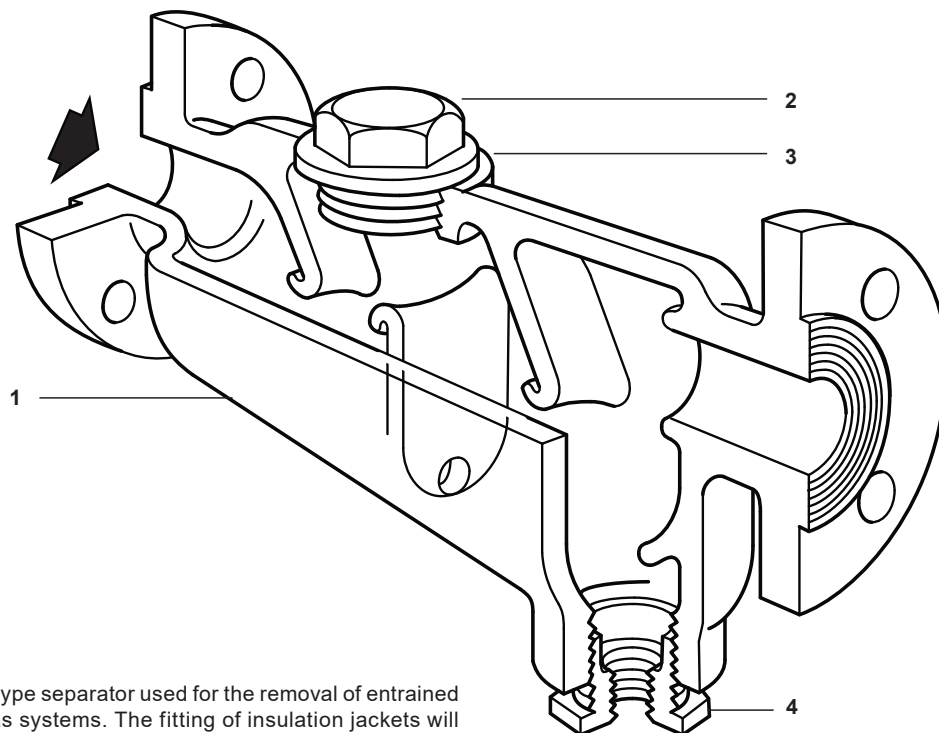




# S13 SG Iron Separator (Flanged)



## Description

The S13 separator is an SG iron baffle type separator used for the removal of entrained liquids in steam, compressed air or gas systems. The fitting of insulation jackets will increase the performance of the separator.

## Standards

This product fully complies with the requirements of the Pressure Equipment Directive (PED).

## Certification

This product is available with a manufacturers' Typical Test Report.

**Note:** All certification/inspection requirements must be stated at the time of order placement.

## Sizes and pipe connections

DN40, DN50, DN65, DN80, DN100, DN125, DN150 and DN200.

Flanged EN 1092 PN16 and PN25 with screwed BSP drain.

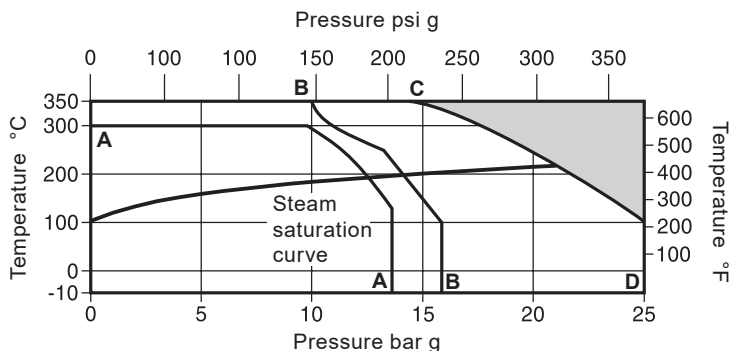
Flanged JIS/KS 10K with screwed BSP drain.

Flanged JIS/KS 20K with screwed BSP drain - DN40, DN50, DN65 and DN200 only.

## Materials

No.	Part	Material	
1	Body	SG iron	BS EN 1563/EN-JS1030
2	Plug	Carbon steel	1.0460 (C22.8)
3	Gasket	Reinforced exfoliated graphite	
4	Drain reducing bush	Forged carbon steel	ASTM A105

## Pressure/temperature limits (ISO 6552)



The product **must not** be used in this region.

- A - A** Flanged JIS / KS 10K.
- B - B** Flanged EN 1092 PN16.
- B - C - D** Flanged EN 1092 PN25 and JIS 20K.

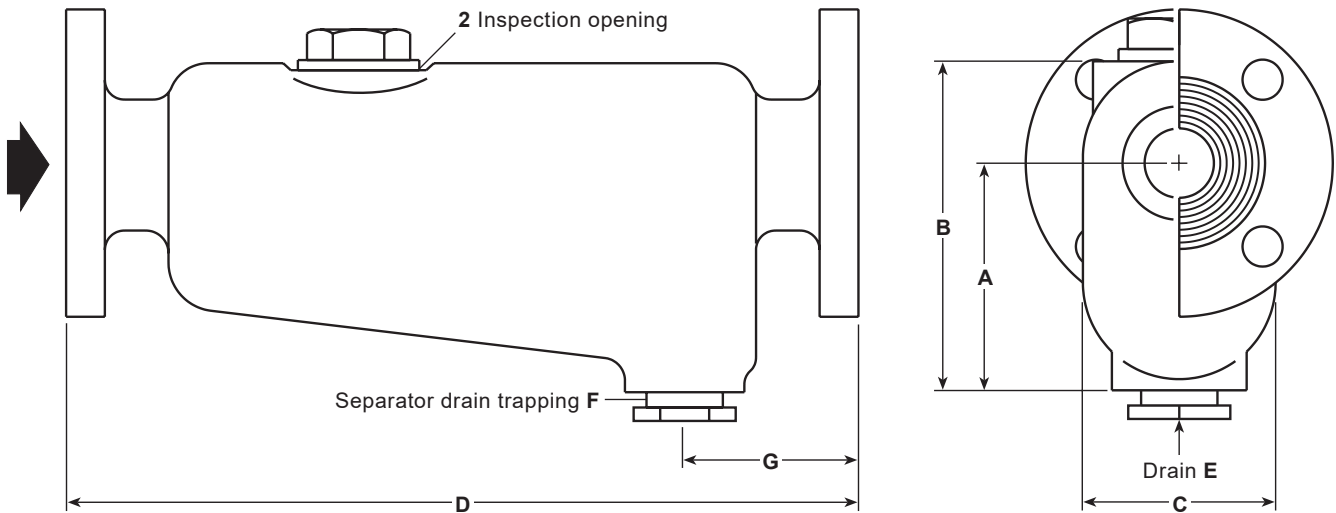
Body design conditions		PN25	
PMA	Maximum allowable pressure	25 bar g @ 100 °C	(632 psi g @ 212 °F)
TMA	Maximum allowable temperature	350 °C @ 14 bar g	(662 °F @ 203 psi g)
Minimum allowable temperature		-10 °C	(14 °F)
		JIS / KS 10K	12.3 bar g (178 psi g)
		PN16	13.7 bar g (198 psi g)
PMO		JIS / KS 20K	21.3 bar g (309 psi g)
Maximum operating pressure for saturated steam service		PN25	21.3 bar g (309 psi g)
TMO	Maximum operating temperature	350 °C @ 14 bar g	(662 °F @ 203 psi g)
Minimum operating temperature		-10 °C	(14 °F)
<b>Note:</b> For lower operating temperatures consult Spirax Sarco.			
		JIS / KS 10K	20.4 bar g (296 psi g)
		PN16	24.0 bar g (348 psi g)
Designed for a maximum cold hydraulic test pressure of:		PN25	37.5 bar g (544 psi g)
		JIS / KS 20K	37.5 bar g (544 psi g)

**Note:** Flanged separators (S13) may be supplied with a lower pressure rating than that cast into the body. Reference should be made to the appropriate operating chart to determine the actual product limitations.



## Dimensions, weight and volumes (approximate)

mm, kg and litres	Size	A	B	C	D	E	F	G	Weight	Volume
	DN40	111	156	89	365	12.7	25.4	94	14	1.6
	DN50	146	205	117	456	12.7	25.4	98	25	3.2
	DN65	178	249	146	406	19.0	38.1	98	28	4.6
	DN80	178	252	152	483	25.4	38.1	98	36	6.5
	DN100	223	315	197	692	25.4	38.1	118	60	13.5
	DN125	226	397	381	706	25.4	38.1	121	128	38.5
	DN150	226	397	381	706	25.4	38.1	121	130	42.5
	DN200	308	502	426	762	38.1	38.1	140	190	68.0

inches, lbs and gallons	Size	A	B	C	D	E	F	G	Weight	Volume
	DN40	4.37	6.14	3.50	14.3	½"	1"	3.70	30.8	0.42
	DN50	5.74	8.07	4.60	17.9	½"	1"	3.85	55.1	0.84
	DN65	7.00	9.80	5.74	15.9	¾"	1½"	3.85	61.7	1.21
	DN80	7.00	9.92	5.98	19.0	1"	1½"	3.85	79.3	1.71
	DN100	8.77	12.4	7.75	27.2	1"	1½"	4.64	132.2	3.56
	DN125	8.89	15.6	15.0	27.7	1"	1½"	4.76	282.1	10.1
	DN150	8.89	15.6	15.0	27.7	1"	1½"	4.76	286.6	11.2
	DN200	12.1	19.7	16.7	30.0	1½"	1½"	5.51	418.8	17.9



### Recommended tightening torques

Item	Size	or		N m	(lbf ft)
			 mm		
2	DN40	46 A/F	M56	150 - 165	(110 - 121)
	DN50	46 A/F	M56	150 - 165	(110 - 121)
	DN65	46 A/F	M56	150 - 165	(110 - 121)
	DN80	60 A/F	M72	190 - 210	(140 - 155)
	DN100	60 A/F	M72	190 - 210	(140 - 155)
	DN125	60 A/F	M72	190 - 210	(140 - 155)
	DN150	60 A/F	M72	190 - 210	(140 - 155)
	DN200	60 A/F	M72	190 - 210	(140 - 155)

## Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P023-55) supplied with the product.

### Installation note:

Install in a horizontal pipeline with the drain directly below.

**Note:** To ensure that any separated liquid is drained away quickly, a suitable liquid drainer or steam trap must be connected to the drain connection 'E' - consult Spirax Sarco for further details.

### Disposal

This product is recyclable. No ecological hazard is anticipated with the disposal of this product, providing due care is taken.

### How to order

Example: 1 off DN50 Spirax Sarco S13 separator with SG iron body having flanged EN 1092 PN16 connections.